

VIRGINIA MILITARY INSTITUTE.

MATHEMATICAL SERIES.

By Col. FRANCIS H. SMITH.

SUPERINTENDENT OF THE VIRGINIA MILITARY INSTITUTE.

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AMERICAN STATISTICAL ARITHMETIC, DESIGNED FOR ACADEMIES AND SCHOOLS,

By Francis H. Smith, A. M.

Superintendent and Professor of Mathematics in the Virginia Military Institute; late Professor of Mathematics in Hampden Sidney College, and formerly Assistant Professor in the United States Military Academy, West Point, and R. T. W. Duke, Assistant Professor of Mathematics, in the Virginia Military Institute. Third Edition.

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An Elementary Treatise on Analytical Geometry.' Translated from the French of J. B. Biot. By Prancis H. Smith, A. M. Revised Edition.

REGISTER

OF THE

Officers and Andets

OF THE

Virginia Military Institute,

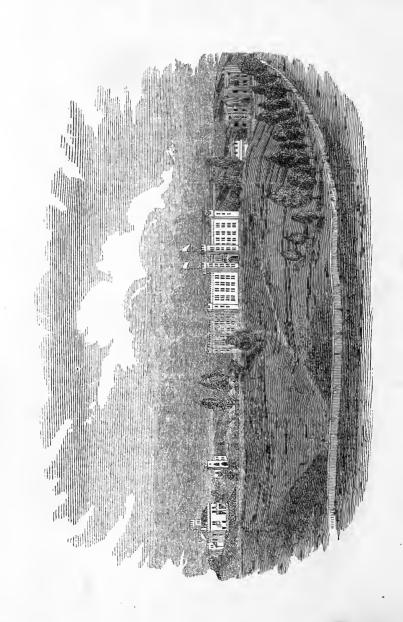
LEXINGTON, VA.

JULY, 1857.

RICHMOND: MACFARLANE & FERGUSSON, PRINTERS.
1857.







REMARKS.

THE VIRGINIA MILITARY INSTITUTE was established, and is supported by the State of Virginia. An arsenal, containing 30,000 stand of arms, is located here, which was formerly guarded by a company of enlisted soldiers, at an annual expense of about \$6,000. In 1839, this appropriation was transferred to the support of a company of cadets, who, in addition to their duties as a guard, should also be placed under a course of instruction, upon the basis of the United States Military Academy, at West Point. Upon this new system the Institute has been in successful operation for eighteen years. The cadets admitted consists of two classes, State and Pay cadets. The Institute supplies to the State cadet his board and tuition; and in consideration thereof, he is required to teach two years after graduation. The Pay cadet is at his own expense, which averages \$350 per year, for every charge, including clothing. The State cadets are selected from those who are unable to bear their own expenses. The Institution has always had as many pupils as its buildings would accommodate, and numbers thirty-two State and one hundred and thirty Pay cadets. Applications are made, by letter, to the Superintendent prior to the first of July, each year, and appointments are made for both classes of cadets, by the Board of Visitors, respect being had to their due apportionment among the several districts of the State.

The Literary Fund of the State contributes \$1,500 per year to the Institute for the education of teachers, and the State has received tuition fees from the pay cadets to the amount of upwards of \$50,000 since its organization, which sum is applied to the increase of the number of State cadets, to the enlargement of the accommodations of the Institute, and to the support of a part of the corps of Professors.

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REMARKS

OF

COL. JAMES L. KEMPER,

President of the Board of Visitors, addressed to the Graduates of the Virginia Military Institute, July 4th, 1857.

(Published by unanimous request of the Board of Visitors.)

GENTLEMEN GRADUATES:

It becomes my task, as the representative of the Board of Visitors, to close these interesting ceremonies. I am charged with the agreeable duty of presenting you fit rewards of honorable toil, in the order in which you have fairly won them. Your proficiency has been tried in the crucible of a painfully prolonged and searching examination. You have passed through burnished and brightened by the ordeal. You have given proofs of scientific and military attainment, especially, which have met our most sanguine expectations; and, while they have well attested your worthiness to wear the honors we are about to bestow, they have served to illustrate the faithful labors and earnest and devoted drudgery of the accomplished Academic Board. It is due to my colleagues of the Board of Visitors, as well as to myself, that I should here publicly declare, that your instructors are proven, by the results manifested to us in your examinations, to have devoted themselves to a system of thorough and laborious drilling of the mental, as well as physical man, to have undergone an amount of toilsome, self-sacrificing and exhausting drudgery in your training, which never have been, and never can be, surpassed at any time, under similar circumstances; which entitle them to the constant tribute of your heartfelt gratitude, and approve them worthy of the applause of the grand old Commonwealth, in whose service they are enlisted. For yourselves, gentlemen, we have well assured our minds, by stern and unerring tests, that you are worthy to be distinguished among your fellow men in the future—as graduates of the Virginia Military Institute. But it becomes my duty to announce that five of your number have outstriped competition—that they are the most distinguished graduates of the Institute for the year 1857. They stand first among compeers, the most eminent where all are honored, and their names

shall be reported by the Board of Visitors, with honorable mention, to his Excellency, the Governor of Virginia, to be recorded in the archives of the Commonwealth.

(The President of the Board delivered the diplomas of the graduates.)

And now, gentlemen, in thus pronouncing your academic nunc dimittis, and bidding you an affectionate "God speed" in the toils of active life which court the embrace of your disciplined energies, I should not, on this "occasion sudden" which I am called to meet, tax your already overcharged attention with any prolonged homilies of my own. After the gymnastic conflicts of the year, in which you have been exercised, I fancy that each of you begins to sigh for a season of rest. This day is the close of a year of toil; and your powers of mind and your sensibilities are rather in the condition of him, who, at the eventide of a day of heat and struggle, goes forth to muse, than of him who rises to new labors, with elastic energies, in the buoyancy of the morning "when jocund day stands tiptoe on the misty mountain tops." I fancy that at this moment, your wearied spirits crave most some grateful and kindly relief,—

"Some simple and heartfeft lay, That shall soothe the restless feeling, And banish the cares of day!

"Not from the grand old masters,— Not from the bards sublime,— Whose distant footsteps echo Along the corridors of time.

"For, like strains of martial music, Their mighty thoughts suggest, Life's endless toil and struggle— And to-day we long for rest!"

After such a profusion of the graces of eloquence, and the achievements of dialectics, as we have enjoyed on yesterday and to-day, the Board of Visitors, instead of arousing your already overtaxed attention with the discussion of any of the great topics suggested by the occasion, may well be excused for dismissing you with a few kindly words of cordial congratulation and encouragement. Then, gentlemen, receive the assurance that the prolonged and painful ordeal of past years, from which this day you successfully emerge, is itself an infallible security for more solid and honorable triumphs in after-life, if but followed up with the same systematic habits of application, and the same disciplined and earnest energy which have characterized your progress thus far. The "well-begun" of past preparation is the "half done" of future enduring success. From your present vantage-ground, all the varied distinctions of active life, the rewards of practical usefulness, are within your grasp. No combination of diffi-

culties can ultimately defeat a resolute man who carries the weapons you wear into the arena of the world's great conflicts. Transient appointments, partial and apparent defeats, temporary disasters, you are bound to suffer; and they will become the familiar associates of your progress. But the obstacles to permanent success are ever in inverse proportion to the strength of will that encounters them. To the soldier of fortune rightly nerved to grapple with adversity, discomfiture itself is the stepping-stone to final victory. Defeat to him is nothing more than an incitement to a higher and a more irresistible will. It but "stiffens the sinews and summons up the blood" for a more vigorous return to the encounter. Another and yet another repulse only inspires him with a nobler fortitude, rouses his latent and hitherto undiscovered energies to the height of the emergency, and gives him fresh premonitions of ultimate victory. Every successive onset only serves to acquaint him the better with the measure of the obstacle to be overcome, and the nature of the appliances and energies to be employed. Until finally tempered with the philosophy of misfortune, fortified by the shield of experience, aroused to invincibility by a will that rises with the necessities of the occasion, he springs Antaus-like with fresh strength from every fall, to the achievement of a victory which combines the highest elements of moral grandeur, which urges him forward to nobler undertakings and prouder triumphs in the future, and which is, after all, but another name for what we tritely call success in life. This is the success in life which is illustrated in a long line of more than imperial conquests in the world of science to which you are now dedicated; conquests achieved by a succession of heroes—from Newton to Maury—heroes in truth and in deed—who, if more modest, were more glorious than any over whom ever floated the blood-dripping eagles of the CESARS or the gleaming oriflamme of HENRY of Navarre.

But, gentlemen, amidst all your future vicissitudes and fortunes, your struggles, and your triumphs, never cease to bear in remembrance—in holy remembrance—the Alma Mater who this day dismisses each of you, with her blessing, "upon the world alone—upon the wide, wide sea," of life's activities and realities. If the Alumni of any one of our other celebrated schools of learning may justly boast of their Alma Mater as the abode of classic traditions and storied literary renown, you may as justly boast that you are admitted into the Temple of Learning by a title of a "higher creation"—that you are consecrated at her altars "by the imposition of a mightier hand." Your Alma Mater is the ever glorious and adored Commonwealth of Virginia! It is the Government of this ancient Dominion which, with noble munificence, has organized, regulated and nurtured this prosperous Military Institute; which for her own protection, security and honor, has chosen you out from among the body of her sons, educated you as more than foster-children, and this day dedicates each of you at the shrine of patriotism sacredly to her service forever. You have been trained daily, with her swords in your hands, under her glowing "sic temper tyrannis"—continually reminded of the highest mutual obligations between yourselves and the Commonwealth; of your sacred duty to bear arms at her bidding against all enemies, and to surrender your lives and your all, whenever she demands it, as a sacrifice upon the altar of her safety. You have been schooled in a great nursery of States' Rights and of patriotic sentiment; and, oh! remember, that it is to the sovereign Commonwealth of Virginia that your lives and your all belong; that you are to be soldiers in her quarrels and champions of her cause; that your ultimate and paramount allegiance and supreme devotion are due to her; that if you render obedience to the Federal Government, or to any other power outside or inside of the Commonwealth, it is obedience which is rendered by virtue of her commands, subject to her control, and is to be withdrawn, abrogated, and annulled, whenever she interposes the glittering shield of her sovereign authority!

INSPECTOR—EX-OFFICIO,

His Excellency HENRY A. WISE, Governor of Virginia.

BOARD OF VISITORS.

Col. JAMES L. KEMPER, Presi	dent,	•	Madison.
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Col. A. HUGHES DILLARD,		•	HENRY.
Col. JAMES H. PAXTON,			Rockbridge.
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Maj. S. V. FULKERSON,			Washington.

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- Col. Francis H. Smith, A. M., Superintendent and Professor of Mathematics.
- Capt. L. B. Williams, Assistant Professor of Mathematics and Assistant Instructor of Tactics.
- LIEUT. S. CRUTCHFIELD, Assistant Professor of Mathematics and Assistant Instructor of Tactics.
- LIEUT. W. T. PATTON, do do do do.
- Major J. T. L. Preston, A. M., Professor of Latin Language and English Literature.
- LIEUT. PHILIP B. STANARD, Assistant Professor of Latin Language and Assistant Instructor of Tactics.
- Major T. H. Williamson, Professor of Engineering and Architecture and Instructor of Drawing.
- Major Wm. Gilham, A. M., Professor of Chemistry, Mineralogy and Geology, Instructor of Infantry Tactics and Commandant of Cadets.
- Major Thomas J. Jackson, Professor of Natural and Experimental Philosophy, and Instructor of Artillery.
- Major R. E. Colston, Professor of French Language.
- LIEUT. E. V. BARGAMIN, Assistant Professor of French.

MILITARY STAFF.

E. L. GRAHAM, M. D.,

R. E. Colston,

LIEUT. S. CRUTCHFIELD.

R. H. CATLETT,

J. T. GIBES,

Surgeon.

Treasurer.
 Adjutant.

- Quarter Master.

- Commissary and Steward.

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	See Remarks.	(4)		8	<u> </u>	_	(6,	, (_e)	R	7		(10)	(11)				<u> </u>						
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	Geography.	-	$\frac{\infty}{2}$	1	No	9 9	17 3 2 8 1 3 1 3	_	CI	∞	က	15	7	10	0	20	14	16	18	1820	53	18	5
	COUNTIES.	Mason,	Westmoreland,		5	Albemarle	folk		oton,		oreland,				d City		Roanoke,				Petersburg,	Matthews,	Portsmouth,
	NAMES.	J. M.	2 R. M. Mayo,	J. J. S	A. M.	"o K. 15. Taylor,	4 8	50	-		Ē	2 A. Fulkerson,	H	4J. A. Hambrick,		6J. M. Steptoe,	7 John Read,	18 J. W. B. Bosworth,	J. C.	Ξ	ر ئ	22 J. W. Keeble,	J. B. Richardson, †
	Gen'l Merit.	*	*	*	* >					_			_	_				_		C/1	C/1	0.1	

Remarks.—¹Acting As. Prof. Latin. ²Lieut. ²2d Capt. ⁴Lieut. ⁵Lieut. °lst Capt. ¹Lieut. ®Adjutant. °Quartermaster. ¹°Lieut. ¹¹Lieut.

Note.—Names marked * are officially reported to the Executive, conformably to a regulation which requires the names of the most distinguished Cadets, not exceeding five in each class, to be reported for this purpose at each annual examination.

FIRST CLASS—(GRADUATES)—1857.

[†] Deficient in conduct.

SECOND CLASS—1857.

General Merit.	NAMES.	COUNTIES.	Mathematics.	Latin.		1			No. of Demerit for the year.	REMARKS.
*1	M. B. Hardin,	Alexandria,	1	1	1	3 1 5 2 11 7	1	3	8	Serg't Major.
*2	L. W. Reid,	do.	3	3	3	1	2	2	0	Q. M. Serg't.
*3	L. L. Marks,	Petersburg,	4	4	4	5	8	3 2 5 1	26	C. Sergeant.
*4	M. McDonald,	Hampshire,	1 3 4 2 5	$\begin{bmatrix} 1 \\ 3 \\ 4 \\ 2 \\ 14 \end{bmatrix}$	2	2	19	1		_
		Jefferson,		14	7	11	7	14	54	Sergeant.
		Shenandoah,	9	17	8	7	3	4	33	Sergeant.
		Rockbridge,	6	6	9	7 4 6 18 12	10	17	148	Sergeant.
		Fauquier,	10	8	12	6	6	7	54	1st O. Serg't.
		Amelia,		21	5	18	9	20	78	Sergeant.
	T. S. Taylor,	Franklin,	7			12	16	10		Sergeant.
	E. C. Edmonds,√	Alexandria,	8		1-0		15			2nd O. Serg't.
12	J. T. Hairston,	Henry,	16			10				
13	G. E. Tayloe, 🗸	Roanoke,				13	5	15	118	Sergeant.
		Richmond,	17	9	16	8	11	12	153	Sergeant.
	Samuel Wilson,	Surry,				20				
	J. Armistead,	Elizabeth City,				19				
	J. B. Terrill,	Bath,				14				
18		Nansemond,				15				Sergeant.
19	D. W. Flowerree,	Fauquier,				16			196	
ì		Norfolk,	13			17				Def. in conduct.
	J. Breckenridge,√	Botetourt,	18	13		21	13	16	165	Sergeant.

THIRD CLASS-1857.

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General Merit.	NAMES.	COUNTIES.	Mathematics.	Latin.	French.	Drawing.	Composition.	Declamation.	Demerit for the year.	REMARKS.
*2 *3 *4 *5	W. H. Clarke, J. W. Lyell, E. S. Hutter, J. H. Chenoweth, C. Y. Steptoe, J. H. Ham,	Richmond City. Richmond. Campbell. Randolph. Bedford. Elizabeth City.	1	$11 \\ 25 \\ 30 \\ 12$	$\begin{array}{c} 4 \\ 15 \\ 9 \end{array}$	9 6	30, 1	5	$78 \\ 163 \\ 92$	Corporal. Color Corporal. Corporal. Corporal.
7 8 9 10	G. Ross, W. H. Otey, W. Keiter, J. W. Lewis,	Culpeper. Campbell. Hampshire. Bath.	12 10 5		10 1 11	19 11 26	$\frac{29}{32}$	13 29 21	79 128 187	Color Corporal. Corporal.
12 13 14	Jno. Fletcher, E. Hill, J. P. Minetree, Wm. M. Palmer, J. F. Tyler,	Loudoun. King William. Petersburg. Halifax. Lee.	13	9 29 32 31	21 13 18	$\frac{17}{10}$	16	$\frac{27}{7}$	$102 \\ 55 \\ 119$	Corporal.
16 17 18 19	J. D. H. Ross, C. W. McDonald, C. G. Coleman, Scott Ship, C. J. Green,	Culpeper. Hampshire. Louisa. Fauquier. Stafford.	15 24 26 22 18	6	$\begin{array}{c} 6 \\ 3 \\ 8 \\ 22 \end{array}$	$ \begin{array}{r} 31 \\ 20 \\ 5 \\ 32 \end{array} $	17 9 3	$12 \\ 16 \\ 3$	174 175 190 107 178	
21 22 23 24	A. G. Hill, V W. L. Wingfield, V J. W. Kerr, V W. B. Tabb, V	King William. Bedford. Petersburg. Amelia. Alexandria.	25 27 21 29	7 17	16 20 30 19	34 22 18 8	18 26 11 27 34	23 25 20 17	10 65	Corporal.
26 27 28 29	W. W. Govan, T. V. Williams, J. Ryland, T. Massenburg,	Amherst. Tazewell. King & Queen. Elizabeth City.	23 17 19 33	15 34 22 10	29 32 33 27	31 25 33 29	21 24 22 13	11 28 15 32	165 164 107 105	ž,
31 32	T. M. Boyd, J. D. Coles, L. W. Mears, D. H. Hardaway, G. B. Cooke, J.	Nelson. Pittsylvania. Elizabeth City. Nottoway. Portsmouth.	$\frac{32}{34}$	$\frac{28}{33}$	31 29 de	$\frac{27}{23}$ 14	$\frac{25}{14}$	19 14 24 8 30	199 149 176 88	Corporal.

FOURTH CLASS—1857.

General Merit.	NAMES.	COUNTIES.	Geography.	English,	Mathematics.	French.	Latin.	Composition.	Declamation.	Demerit for the year.		
- *12 - *3 - *4 - *5 - 6 - 7 - 8 - 9 - 10 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 28 - 30 - 31 - 32 - 33 - 33 - 33 - 33 - 33 - 35	D. Paynor, J. G. Miller, J. H. Hebard, J. B. Cherry, C. L. Lumsden, D. L. Sublett, W. N. Otey, J. M. Morrison, M. B. Ellzey, J. S. Ashton, B. C. Wherry, W Brockenbrough J. T. Tosh, Wm. H. Morgan, A. B. Paris, J. R. Kent, J. M. Oliver, Thos. A. Hardy, J. P. Lynch, N. C. Harris, J. R. Hutter, St. Geo. Coalter, W. G. Paxton, J. McCarty, C. H. Harris, E. Hardy, A. S. Scott, V. M. Johnson, J. R. Moseley, W. Overton, W. B. Pendleton, W. B. Bentley, J. H. Trent, C. Breckinridge, J. K. Marshall,	Brunswick, Mathews, Fluvanna, Norfolk, Petersburg, Powhatan, Campbell, do. Brunswick, Loudoun, Culpeper, Richmond, Charlotte, Montgomery, Meckleuburg, Norfolk, Richmond, Campbell, Hanover, Rockbridge, Loudoun, Brunswick, Norfolk, Hardy, Spotsylvania, Appomattox, Louisa, do. Montgomery, Cumberland, Botetourt, Fauquier,	15 9 18 14 16 7 6 8 1 21 20 3 5 4 4 3 2 2 5 2 4 1 1 2 1 5 2 2 7 5 1 4 8 3 3 5 1 5 2 2 9 2 8 4 7 5 1 0 4 1 3 1 2 6	16 4 9 11 19 13 30 18 10 5 42 16 3 24 14 32 5 39 41 37 43 29 26 21 22 8 44 2 40	37 11 48 26 92 11 10 22 12 13 32 36 16 30 18 27 26 19 14 28 15 33 16 33 16 33 16 33 16 33 16 33 17 33 17 33 17 33 17 33 17 33 34 34 35 36 36 36 37 37 37 37 37 37 37 37 37 37 37 37 37	10 6 1 16 4 29 8 35 15 11 43 21 8 19 27 26 17 28 2 13 33 25	112 7 15 9 26 19 10 20 11 16 24 18 29 35 37 29 6 2 43 4 22 14 3 32 34 5 42 13 37 12 12 28 27 33	-1 16 12 29 46 11 15 31 42 14 37 42 21 39 32 34 25 41 43 39 32 41 43 43 43 43 44 45 47 49 47 49 47 49 47 49 49 49 49 49 49 49 49	$\begin{array}{r} -9\\ 12\\ 42\\ 29\\ 30\\ 25\\ 43\\ 1\\ 32\\ 39\\ 11\\ 28\\ 32\\ 39\\ 11\\ 28\\ 31\\ 32\\ 31\\ 45\\ 42\\ 49\\ 18\\ 26\\ 40\\ 40\\ 40\\ 40\\ 40\\ 40\\ 40\\ 40\\ 40\\ 40$	766 522 544 622 1199 833 1299 977 759 1688 333 30 1355 1482 633 411 102 32		
3 8 39 40	W. F. Sydnor, A. T. Walden, F. T. Hill, G. D. Parker, J. P. Baltzell,	Petersburg, Rappahannock, Culpeper, Portsmouth, Washington,	$\frac{43}{35}$	$\frac{32}{12}$	$\frac{40}{41}$ 34	38 30 34 39 24	31 39 47	32 4 33	$\frac{41}{1}$	88 16 198 192 92		

17

FOURTH CLASS-CONTINUED.

General Merit.	NAMES.	COUNTIES.	Geography.	English.	Mathematics.	French.	Latin.	Composition.	Declamation.	Demerit for the year.	
	R. S. Blair,	Ritchie,				40				175	
43	T. B. Amiss,	Rappahannock,				41					
44	T. B. Booth,	Petersburg,				45					
45	R. S. Majett,	Southampton,				46					
46	M. P. Deverle,	Roanoke,	45	46	44	47	48	50	16		
47	R. C. Taylor,	Montgomery,	46	52	46	50	46	10	48	200	
48	G. M. Kent,	do.				48					
	S. Heth,	Culpeper,				51					
	H. C. Beckham,	do.								def.	
		Bedford,	42	17	21	12	8	8	50	def.	

FIFTH CLASS—1857.

NAMES.	COUNTIES.	English.	Mathematics.	Composition.	Demerit for the	year.	REMARKS.
J. W. Willcox,	King George, Southampton, Chesterfield, Charles City, Culpeper,	4 5 1 3 2	$\frac{1}{2}$	1 2 3 4 5	1	48 63 90 77	Deficient in conduct.

ROLL OF CADETS,

ARRANGED ACCORDING TO MERIT IN CONDUCT,

For the year ending July 1st, 1857.

NAMES.	Class.	Demerit.	NAMES.	Class.	Demerit.
J. McCausland,	1	0	H. B. Meade,	2	78
R. K. McCausland,	1	0	E. S. Hutter,	$\begin{vmatrix} 2 \\ 3 \end{vmatrix}$	- 78
J. J. Smith,	1	0	G. Ross,	3	79
L. W. Reid,	$\begin{vmatrix} 1\\2\\2\\3 \end{vmatrix}$	0	J. Ker,	1	81
M. B. Hardin,	2	8	D. L. Sublett,	4	82
A. G. Hill,		10	W. M. Palmer,	4 3 4 4 3 4 1 3 4	84
P. P. Slaughter,	1	12	J. B. Moseley,	4	85
E. C. Edmonds,	$\begin{vmatrix} 2\\4\\3 \end{vmatrix}$	14	W. F. Sydnor,	4	88
A. T. Walden,	4	16	D. H. Hardaway,	3	88
W. H. Clarke,	3	20	J. P. Baltzell,	4	92
B. F. Stewart,	1	25	J. M. Steptoe,		92
L. L. Marks,	2	26	C. Y. Steptoe,	3	92
H. Ker,	1 2 1 4 4 2 4	28	J. M. Otey,	4	97
W. A. Brockenbrough,	4	30	J. H. Ham,	3	100
St. Geo. Coalter,	4	32	W. G. Paxton,	4	101
Jno. F. Neff,	2	33	J. Fletcher,	3	102
B. C. Wherry,	4	33	J. R. Hutter,	4	102
R. B. Taylor,	1	34	Thos. Massenburg,	3	105
C. H. Harris,	4		J. M. Oliver,	4	105
N. C. Harris,	4		J. Ryland,	3	107
E. C. Breckinridge,	5	45	Scott Ship,	3	$\frac{107}{112}$
L. D. Greenlaw,	9	48	A. M. Fauntleroy,	1	112
J. W. Lyell,	3	49	G. E. Tayloe,	$\begin{vmatrix} 2\\2\\3 \end{vmatrix}$	715
J. G. Miller,	4	52	H. L. Norfleet,	2	$\frac{118}{119}$
W. E. Cutshaw,	2	54 54	J. P. Minetree,	3	$\frac{119}{119}$
J. M. Kincheloe,	1	54	C. L. Lumsden,	4	121
J. H. Hebard,	1 4	55	T. B. Amiss,	1	121
E. Hill,	3 4 2 4 3 4	57	J. H. Cameron, W. H. Otey,	3	$\frac{121}{128}$
J. M. McCarty,	4	62	W. N. Otey,	4	129
J. B. Cherry,	4	63	A. S. Scott,	4	129
J. P. Lynch,	5	63	T. S. Taylor,	2	129
J. R. Tyler,	9	64	J. T. Tosh,	2 4	135
J. W. Lewis,	3 3	65	V. M. Johnson,	1	136
W. L. Wingfield,			G. B. Cooke,	3	137
A. Fulkerson, J. Kent,	1 4 4 4 5	76	J. A. Hambrick,	1	138
	1	76	W. H. Morgan,	4	138
D. Poynor,	1	77	S. G. White,	1	139
J. H. Morrison, J. W. Willcox,	5	77	Thos. A. Hardy,	14	142

19

ROLL OF CADETS—(CONTINUED.)

NAMES.	Class.	Demerit.	NAMES.	Class.	Demerit.
A. Rives,	1	148	C. W. McDonald,	3	175
N. C. Wilson,	1 2 3	148	J. K. Marshall,	4	176
J. D. Coles,	3	149	L. W. Mears,	4 3 3	177
R. S. Majett,	4	149	C. J. Green,	3	178
R. M. Mayo,	1	153	W. B. Pendleton,		178
T. L. Pitts,	2	153	J. C. Hiden,	1	183
J. W. B. Bosworth,	$\begin{array}{ c c } 2 \\ 1 \end{array}$	157	G. M. Kent,	4	185
J. H. Trent,	4	158	T. B. Booth,	4	186
M. G. Ellzey,	4	159	W. Keiter,	3	187
J. H. Chenowith,	3	163	A. B. Paris,	4	189
W. B. Bentley,	4	164	T. R. Dunn,	5	190
T. V. Williams,	3	164	C. G. Coleman,	3	190
J. W. Keeble,	1	165	S. Heth,	4	190
W. W. Govan,	3	165	J. W. Ker,	3	191
J. Breckinridge,		165	G. D. Parker,	4	192
J. S. Ashton,	$\begin{bmatrix} 2\\4\\3 \end{bmatrix}$	168	M. P. Deyerle,	4	194
W. B. Tabb,	3	170	D. W. Flowerree,	2	196
J. A. Armistead,	2	173	M. McDonald,	2	197
S. Wilson,	$\begin{bmatrix} 2\\2\\3 \end{bmatrix}$	173	F. Hill,	4	198
J. D. H. Ross,	3	174	J. F. Tyler,	4 1 4 4 3 4 5 3 4 3 4 4 2 2 4 3 3 3 3 3	198
W. H. Overton,	4	174	T. M. Boyd,	3	199
E. McConnell,	1	174	Chas. W. Hardy,	1	200
J. T. Hairston,		174	R. C. Taylor,	1 4	200
R. S. Blair,	2 4 3 1	175	† H. C. Beckham,	4 4	de.
O. C. Henderson,	3	175	† W. M. Mitchell,	4	de.
J. Read,	1	175	J. E. Ficklin,	5	de.
J. B. Terrill,	2		132 J. C. Pegram,	2	de.

[†] Deficient in conduct.

NEW APPOINTMENTS.

NAMES.	COUNTIES.	No.	NAMES.	COUNTIES.
1 S. F. Adams,	Bedford,	29	F. Griffith,	Westmoreland,
2 J. F. Hamlett,	Henry,			Surry,
	Wheeling,			Isle of Wight,
4 H. H. Fauntleroy,		32		Powhatan,
5 W. E. Park,	Jackson,		David Graham,	Wytheville,
6 R. S. Kinney,	Augusta,		L. E. Caperton,	Monroe,
7 J. W. Houck,	Rockingham,	35	Ed. Cunningham	Powhatan,
8 N. C. Wilson,	Botetourt,		W. H. Tate,	Wytheville,
9 R. L. Williams,	Essex,	37	George Norton,	Richmond City,
10 J. D. McCabe, .	Richmond,	38	L. Hardeman,	Henry,
11 J. B. Coakley,	Stafford,	39	Thos. Kinney,	Staunton,
12 T. G. Hart,	Fauquier,	40	A. B. Yuille,	Campbell,
13 W. H. Ligon,	Rockbridge,	41	W. A. Gregory,	Mecklenburg,
14 B. Coltrain,	Carroll,	42	W. Tabb,	Norfolk City,
15 F. D. Hume,	Orange,	43	J. H. Gilmer,	Richmond City,
16 J. E. Heth,	Northampton,		Wm. Russell,	Mecklenburg,
17 E. K. Otey,	Bedford,		Townes,	do
18 W. N. M. Otey,	Richmond City,			do
19 Semmes,	do do	47	,	do
20 Charles Davidson,		48		Botetourt,
21 E. H. Mohler,	Page,		Wm. Bell,	Bedford,
22 E. S. Wooldridge,	Chesterfield,		D. E. Marable,	
23 Y. N. Oliver,	Roanoké,		W. M. Peyton,	Roanoke,
24 C. H. Betts,	Northumberl'd,		W. A. Read,	Campbell,
25 W. F. Moseley,	Buckingham,	53	S. R. Hammet,	Montgomery,
26 G. E. Tabb,	Gloucester,		B. H. Walker,	King & Queen,
27 S. S. Brooke,	Stafford,		Thos. Robinson,	Richmond City,
28 R. C. Nicholas, Jr.	Richmond City,	50	S.C. H. Smith,	Alexandria.

SYNOPSIS

OF THE

COURSE OF STUDIES AT THE VA. MILITARY INSTITUTE.

STUDIES.	TEXT BOOKS.
Arithmetic. Algebra to Equations, 2d Degree. Geometry to 5th Book. English Grammar. Geography. Declamation and Composition.	Smith and Duke's Arithmetic. Smith's Algebra. Davies' Legendre, Geometry. Bullion's Grammar. Mitchell's Geography.
Algebra Completed. Geometry Completed. Plane and Sperical Trigonometry. Geography. French. Latin. English Studies with Composition and Declamation.	Smith's Algebra. Davies' Legendre's Geometry. Do. Do. Do. Mitchell's Geography. Bolmar's Levizac's Grammar. Picot, Nos. 5 and 6.
Analytical Geometry. Descriptive Geometry. Shades, Shadows and Perspective. Surveying. Differential and Integral Calculus. French. Latin. Drawing. Declamation and Composition. Natural Philosophy. Latin. Drawing. Rhetorical Exercises.	Smith's Biot Analytical Geometry. Davies' Descriptive Geometry. Lectures. Davies' Surveying. Courtenay's Calculus. Gil-Blas. Picot No. 7, &c., &c. Bullion's Grammar, Cæsar, Sallust, Virgil, Cicero and Livy. Bartlett's Optics, Mechanics and Astronomy. Roger's Turner. Tacitus, Horace, Terrence.
Geology and Mineralogy. Agricultural Chemistry. Military Engineering. Civil Engineering. Rhetoric. Logic. Mental Philosophy. Moral Philosophy. History. Constitution of United States. Infantry Tactics. Artillery.	Hitchcock and Dana. Norton's Elements. Mahan. Lectures by Professor. Whateley and Blair. Wayland. Paley and Butler. Dew's Lectures. Upshur's Notes and Bayard. Scott, 3 volumes, and Hardee. Same as at U. S. Mil. Academy.

Note.—Cadets on admission may enter the fifth, fourth, third or second class, according to qualification upon examination—but no cadet can enter a higher class than the second—and each cadet is required to remain two years, unless sooner discharged.

EXPLANATION OF CONDUCT ROLL.

All offences against Orders or Regulations are recorded.

These offences are divided into seven grades; each of which comprises offences of nearly the same degree of criminality. The degree of criminality of offences of each grade is expressed by a number, as follows:

Offences	\mathbf{of}	the :	1st	grade	by 10
Do	"	5	2d	"	8
\mathbf{Do}	"		3d	"	5
Do	"	-	4th	"	4
Do	"		5 h	46	3
. Do	"	(6th	. "	2
Do	"	,	$7 ext{th}$	"	1

For each year (after the first year) that a Cadet has been a member of the Institute, his offences are made to count more, by adding to the number expressing the degree of criminality, of each offence, one-sixth for the third class—and one-third for the second class—and one-half for the first class.

At the end of the Academic year, these numbers are added up, and the sum thus obtained is that found in the column of "demerit."

When a Cadet has more than 100 demerit by the 1st of January, or 200 in one year, he is dismissed *ipso facto*.

GRADUATES

OF THE

Virginia Military Institute, since its organization.

			Date	
NO.	NAMES.	COUNTIES.	of gradu- ation.	REMARKS.
			1	
×1 777	D. El.	A 3	July 4,	
	D. Fair,	Amherst,	1842	Lawyer—Teacher.
*2 W	H. Henderson,	Loudoun,	do	Lawyer. [Mil. Ac.
	B. Strange,	Fluvanna,	do	Principal Albemarle
	J. B. Cramer,	Frederick,	do	Teacher.
	Pendleton,	Botetourt,	do	Lawyer.
6 J.	H. Lawrence,	Caroline,	do	Dentist.
	M. Elliott,	Buckingham,	do	Editor Rich'd Whig.
8 J.	H. Jameson,	Culpeper,	do	Lawyer.
	P. Dyerle,	Montgomery,	do	Assis't Surg. U. S. A.
10 J.	T. Smith,	Norfolk,	do	Tennessee
11 W	Forbes,	Richmond,	do	Prof. Math. University
12 V.	C. Saunders,	Loudoun,	do	Teacher.
13 J.	W. Bell,	Augusta,	do	Farmer.
140.	M. Knight,	Nottoway,	do	Physician.
15 Ja	mes Marshall,	Warren,	do	Farmer.
	A. Garnett,	Essex,	do	Lawyer.
			July 4,	
*17 N.	H. Campbell,	Bedford,	1843	Lawyer.
*18.J.	B. Dorman,	Rockbridge,	do	Lawyer.
		Loudoun,	do	Merchant.
20 H	W. Wildman, T. Barton,	Spottsylvania,	do	Physician.
21 W	J. Warden,	Augusta,	do	Clergyman.
	. C. Jeffress,	Nottoway,	do	Lawyer. Macon Col
23 J.	C. Wills,	Isle of Wight,	do	Prof. Math. Randolph
24 V	H. Rodes,	Campbell,	do	Merchant.
	L. Bryan,	Petersburg,	do	Physician.
	Winston,	Amherst,	do	Civil Engineer.
+27 W	. S. Beale,	Shenandoah,	do	Merchant.
	T. Washington,	Westmoreland,	do	Deputy Sheriff.
	W. Williams,	Roanoke,	do	Teacher.
29 G.	w. williams,	поаноке,	July 4,	
*20 T	TT Diag	T		
~30 J.	H. Pitts,	Essex,		Princip'l Rumford Ac
	McKennie,	Albemarle,	do	Physician.
	C. Cummings,	Washington,	do	Lawyer.
	A. Campbell,	Washington,	do	Lawyer.
	A. Porterfield,	Berkeley,	do	Editor. [Va. Leg.
	S. Burks,	Bedford,	do	Farmer and member
36 E.	Taylor,	Caroline,	l do	Farmer.

			Date	
NO.	NAMES.	COUNTIES.	of	REMARKS.
110.	NAMES.	COUNTIES.	Gradu-	REMARKS.
			ation.	
			July 4,	
37	W. H. Richardson,	Henrico,	1844	Adj. General's Office.
38	J. B. Clemens,	Ohio,	do	Physician.
	,	·,	July 4,	111301014111
*39	H. T. Lee,	Frederick,	1845	Clergyman. Teacher.
*40	R. T. W. Duke,	Albemarle,	do	Lawyer. Teacher.
41	J. B. Sherrard,	Hampshire,	do	Merchant.
	R. H. Simpson,	Warren,	do	Teacher.
43	W. H. R. Wheelwright,	Wagtmoreland	do	Clergyman. Teacher.
+44	H. B. Hill,	Buckingham,	do	Teacher.
45	D. A. Langhorne,	Campbell,	do	Physician. Prof. in
46	C. Boggess,			
+47	W H Bakar	Harrison,	do	Lawyer. [Ly'g Col.
18	W. H. Baker, R. M. Wiley,	Frederick,	do	Lawyer.
40	V. T. Churchman,	Botetourt,	do	Farmer & Mem. Va.
50	J. R. Cabell,	Augusta,	do	Physician. [Leg.
51	J. R. Capell,	Pittsylvania,	do	Physician.
	A. H. Powell,	Brunswick,	do	Clergyman.
52	H. W. Williamson,	Norfolk,	do .	Civil Engineer.
23	J. B. Moorman,	Pendleton,	do	Teacher.
754	J. P. Mason,	Rappahannock,	do	Teacher.
55	W. H. Stith,	Richmond,	do	Civ. Eng. Teacher.
56	E. M. Anthony,	Botetourt,	do	Lawyer.
57	R. L. Walker,	Albemarle,	do	Civ. Eng. Farmer.
			July 4,	
†*58	T. B. Robertson,	Richmond,	1846	Lawyer and Professor
*59	J. Q. Marr,	Fauquier,	do	Sheriff. Math.
60	W. M. Nelson, .	Clarke,	do	Clergyman. Teacher.
61	R. E. Colston,	Berkeley,	do	Professor of French V.
62	R. H. Keeling,	Richmond,	do	[M. I.
63	G. W. Bruce,	Frederick,	do	Physician.
64	J. C. Porter,	Orange,	do	Teacher.
65	J. M. Patton, Jr.	Richmond City,	do	Lawyer.
.66	Edmund Goode,	Bedford,	do	Teacher.
67	Wm. C. Leyburn,	Rockbridge,	do	Farmer and Merchant.
68	P. A. Fitzhugh,	Middlesex,		Physician. Teacher.
69	R. Tyler,	Prince William,	do	Physician.
70	R. Mills,	Richmond,	do	Farmer.
	W. J. Green,	Stafford,	do	Merchant.
, 1			July 4,	TITOL OURSELLOS
*79	R. H. Sinton,	Henrico,	1847	Merchant.
*73		Culpeper,	do	Civil Engineer.
		Clarke,	do	
75				Lawyer. Prof. Sou. Fem. Inst.
76	I C Mononeo	Loudoun,	do	
77		Stafford,	[_ 9	Lawyer.
70	U B Smyth	Madison,		Teacher. Lawyer.
	H. B. Smyth,	Wythe,		Teacher.
	Wm. Mahone,	Southampton,		Chf. Eng. Norf. & Pet.
OUI		Proston	do	TOGODOR ROLLMOOD
80		Preston, Rockingham,		Teacher. [Railroad. Physician.

			Date	
NO	DI A DATEC	COTTATRITEC	of	TOTAL A TOTAL
NO.	NAMES.	COUNTIES.	Gradu-	REMARKS.
			_	
			ation.	
		/	July 4,	
±82	J. M. Claytor,	Campbell,	1847	Civil Engineer.
	W. Downs.		do	
00	W. DOWES,	Rockbridge,		
			July 4,	
*84	S. T. Pendleton,	Campbell,	1848	Civil Eng. Teacher.
*85	J. C. Council,	Norfolk,	do	Teacher Fleetwood A-
86	J. M. Cary,	Greenbrier,	do	Teacher. [cademy.
87	C. V. Winfree,		do	
00	C. V. Willinee,	Campbell,		Civil Engineer.
00	C. A. Derby,	Dinwiddie,	do	Clergy'n. Prof. Mat.
89	A. L. Rives,	Albemarle,	do	Civ. Eng. [Geo. Mil.
. 90	J. R. Jones.	Rockingham,	do.	Teacher. Acad.
91	J. T. Ellis,	Amherst,	do	Merchant.
92	J. P. Beale,		1 -	00
		Westmoreland,	do	Clergyman.
	R. E. Rodes,	Campbell,	do	Civil Engineer.
	J. S. Gamble,	Hardy,	do	Prin. Norfolk Acad.
95	C. Carter,	Charles City,	do	Manufacturer.
±96	C. W. Cary,	Greenbrier.	do	Physician.
97	W. H. Pryor,		do	
00	T. C. II. Fryor,	Dinwiddie,	1 -	1
98	E. G. Wall,	Frederick,	do	Civil Engineer.
99	N. Berkeley,	Loudoun,	do	Civil Eng. Farmer.
100	G. W. Robertson,	Warwick,	do	Civil Engineer.
101	J. Jones,	Jefferson,	do	Teacher. Clergyman.
102	N. Tyler,	Prince William,		
102	T C D			Lawyer.
100	J. G. Brodnax,	Dinwiddie,	do	Physician.
104	F. B. Jones,	Frederick,	do	Farmer.
105	B. G. Baldwin,	Augusta,	do	U. S. Mil. Storekeeper.
106	W. W. Finney,	Powhatan,	do	•
107	R. C. Trigg,		do	
101	it. C. Ingg,	Montgomery,		
*100	T 1 T	D	July 4,	
*108	John Lawson,	Richmond City,	1849	Civil Fngineer.
*109	J. W. Massie,	Augusta,	do	Lawyer. [College.
	S. Garland, Jr.	Campbell,	do	Lawyer Prof. Lyn'g
111	E. T. Fristoe,	Rappahannock,	do	Prof. Math. Col. Col.
110	T W Allen			
110	J. W. Allen,	Bedford,	do	Teacher. Farmer.
113	Robert Gatewood,	Norfolk City,	do	Clergyman. Teacher.
114	W. J. Morrissett,	Chesterfield,	do	Teacher.
115	T. H. Carter,	Clarke,	do	Physician. Farmer,
116	Richard Pollard, Jr.	Albemarle,	do	Merchant.
717	Dishard Londru, 91.			
110	Richard Logan, Jr.	Halifax,	do	Civil Engineer,
118	F. Lackland,	Jefferson,	do	Civil Engineer.
-119	K. Otey,	Campbell,	do	Merchant.
120	J. H. Estes,	Nelson,	do	Physician.
121	W. Steenbergen,	Mason,	do	Farmer.
122	D R Adams		1	
144	P. B. Adams,	Harrison,	do	Teacher.
123	E. T. Bridges,	Richmond City,	do	
		Essex,	do	Teacher. Lawyer.
124	F. W. Cox,	MOSGA,		
$\frac{124}{125}$	F. W. Cox, W. Byrd.			i -
125	W. Byrd,	Frederick,	do	Lawyer.
$\frac{125}{126}$	F. W. Cox, W. Byrd, J. F. Jordon, B. Ficklin,			i -

NO.	NAMES.	COUNTIES.	Date of Gradu- ation,	REMARKS.
			July 4,	
128	G. P. Terrill,	Bath,	1849	Teacher. Physician.
129	Amb. Ranson,	Jefferson,	do	Farmer.
130	J. B. Norville,	Prince William,		Teacher. Civil Eng'r.
	L. P. Thompson,	Augusta,	do	Lawyer.
	,	and and the	July 4,	
*132	W. W. Gordon,	Essex,	1850	U. S. Coast Survey.
*133	P. B. Smith,	Northampton,	do	Lawyer.
134	W. D. Stuart,	Augusta,	do	Prin. Rich'd Acad.
	Charles Denby,	Richmond City,		Teacher. Editor.
136	C. D. Rice,	Jefferson,	do	Teacher.
137	T. O. Benton,	Nansemond,	do	Teacher.
138	J. Gallatin Paxton,	Rockbridge,	do	Civ. Eng. Ed. Lyn'g
139	C. H. Harrison,	Cumberland,	do	Merchant. [Rep.
140	D. Truehart,	Richmond City,		U. S. Coast Survey.
141	W. B. Littlepage,	King William,	do	Teacher. [Lawyer
142	J. M. Brockenbrough,	Richmond,	do	Teacher.
143	W. H. Urquhart,	Southampton,	do	Farmer.
144	G. Jordon,	Page,	do	Civil Engineer.
145	Charles Smith,	Northampton,	do	Physician.
146	W. R. Terry,	Bedford,	do	Merchant.
147	A. C. Jones,	Marshall,	do	Lawyer. Judge.
148	William Booton,	Madison,	do	Civil Engineer.
110	William Doolon,	madison,	July 4,	Olvii Engineer.
140	J. A. Marshall,	Fauquier,	1851	Teacher. Lawyer.
150	W. Y. C. Humes,	Washington,	do	Teacher. Lawyer.
151	F. S. Bass,	Brunswick,	do.	Teacher.
159	P. C. Gibbs,	Morgan,	do	Teacher. Merchant.
153	W. H. Burroughs,	Princess Ann,	do	Teacher.
154	J. T. B. Winfree,	Campbell,	do	Merchant.
155	J. C. Page,	Cumberland,		Farmer.
156	E. P. Taylor,		do	Farmer.
157	R. S. Burks,	King George, Botetourt,	do	Teacher.
158	T. A. Harris,	Bedford,	do	Teacher. Physician.
150	C. Cooke,	Hanover,	do	Farmer.
160	R. O. Whitehead,		do	
161	H. Carrington,	Nansemond, Charlotte,	do	Teacher. Civil Eng'r. Farmer.
169	G. G. Garrison,	Dringogg Ann		
162	A. J. Vaughan,	Princess Ann, Dinwiddie,		Civil Engineer.
		Madison,		Civil Engineer. Farmer.
165	B. F. Elliott, W. A. Harris,		do	
166	H. T. Parrish,	Rockbridge,	_	Teacher.
167	J. H. Johnston,	Cumberland,		Lawyer.
		Norfolk City,		Farmer.
160	H. Caperton,	Monroe,	do	Physician.
170	Thomas Upshaw,	King & Queen,	do	Teacher. Civil Eng'r.
171	R. F. W. Morris,	Amherst,	- 1	Merchant.
	H. Gantt,	Albemarle,		Farmer.
1/2	A. B. Jordan,	Isle of Wight, Alexandria,		Teacher. Civil Eng'r. Civil Engineer.
170	W. A. Eliason,			

			Date of	
10.	NAMES.	COUNTIES.	Gradu-	REMARKS.
			ation.	
			July 4,	DI
174	W. Whitehead,	Nansemond,	1851	Physician. Surgeon
175	A. F. Gooch,	Richmond City,	do	Farmer. [Rus. Arm
176	A. D. Callcote,	Isle of Wight,	do	Teacher. [at Sevast']
177	James Giles,	Pittsylvania,	do	Teacher.
			July 4,	[Math. Lynch'g Col
178	J. E. Blankenship,	Amelia,	1852	U. S. Coast Sur. Pro
179	G. S. Patton,	Richmond City,	do	Teacher. Lawyer.
	Joseph Mayo,	Westmoreland,	do	Lawyer.
	W. M. Gordon,	Fauquier,	do	Teacher. Civil Eng'r
182	W. O. Yager,	Page,	do	Civil Engineer.
183	H. A. Whiting,	Hanover,	do	Teacher. Civil Eng'
	S. B. Gibbons,	Page,	do	Teacher.
185	C. T. Mason,	King George,	do	Civil Engineer.
186	J. C. Mayo,	Westmoreland,	do	Teacher. Physician.
187	T. R. Thornton,	Caroline,	do	Prin. Rap. Academy.
88	B. F. Hudgins,	Elizabeth City,	do	Farmer.
	John C. Grayson,	Alexandria,	do	Physician.
	M. P. Christian,	Campbell,	do	Teacher.
	Thos. T. Munford,		do	Farmer.
100	N. H. Harrison,	Richmond City,	do	rainici.
		Spotsylvania,		Merchant. Civ. Eng'
	John G. Meem,	Campbell,	do	Teacher.
	C. B. Williams, Jr.	Culpeper,	do	reacher.
	M. B. Manser,	Fayette,	do	Teacher.
	G. A. Goodman,	Albemarle,	do	
	Jas. V. Hall,	Princess Ann,	do	Teacher.
	Wm. M. Waller,	Amherst,	do	Farmer.
199	W. J. Preston,	Richmond City,		Civil Engineer.
200	J. L. Ashby,	Clarke,	do	Farmer.
201	M. F. Tutwiler,	Fluvanna,	do	Civil Engineer.
	T III 35 0	g	July 4,	
202	J. T. Murfee,	Southampton,	1853	Teacher. Prof. Math
203	W. Silvester,	Norfolk City,	do	Teacher. [Lyn'g Co.
204	P. S. Lewis,	Mason,	do	Farmer.
	W. W. Williams,	Norfolk City,	do	Clergyman. [Acad
	J. J. Phillips,	Nansemond,	do	Principal Chuckatuck
	Geo. H. Smith,	Fairfax,	do	Teacher. Lawyer.
208	T. G. Smith,	Norfolk City,	do	Lawyer.
209	J. L. White,	Washington,	do	Physician.
210	J. P. Hammet,	Montgomery,	do	Physician.
211	J. D. Bruce,	Frederick,	do	
212	J. C. Ward,	Campbell,	do	Farmer. Teacher.
	Geo. Chamberlayne,	Norfolk City,	do	Broker.
	Gab. Gray,	Culpeper,	do	Teacher.
	Wm. Kemble,	Monongalia,	do	Teacher. U. S. Army
	J. R. Waddy,	Northampton,	do	Teacher.
017	J. W. Cringan,	Richmond City,		Civil Engineer.
21/	- · · · · · · · · · · · · · · · · · · ·		do	
217 218	Wm. F. Lee,	Alexandria,	1 (10)	Teacher. U.S. Army

- 1		779	Date of	100.00
NO.	NAMES.	COUNTIES.		REMARKS.
			Gradu-	
			ation.	
200			July 4,	
220	Francis Mallory,	Elizabeth City.	1853	Civil Eng. U. S. Army
221	Alex. Morson,	Stafford.	do	Civil Engineer.
.222	H. B. Armistead,	Fauquier.	do	Teacher.
223	N. Hammond,	Berkeley,	do	
224	J. M. Lightner,	Pocahontas,	do	Farmer.
225	W. E. Arnold,	Franklin,	do	Teacher.
226	T. J. Moncure,	Caroline,	do	Teacher.
			July 4,	
*227	Richard Taylor,	Norfolk City,	1854	Teacher. Prof. Norf!
*228	J. H. Lane,	Matthews,	do	Teacher, Acad
229	R. P. Carson,	Washington,	do	Teacher.
	C. E. Lauck,	Frederick,	do	Teacher.
231	James W. Humes,	Washington,	do	Teacher.
	Wm. Browne Botts,	Spotsylvania,	. do	Teacher.
233	Wm. E. Harrison,	Loudoun,	do	Civil Engineer.
234	J. L. Stephenson,	Fauquier,	do	l Ingineer.
235	C. E. Lightfoot,	Culpeper.	do	Principal Culp. Acad.
236	Geo. B. Horner,	Fauquier,	do	Civil Engineer.
237	C. H. Riddick,	Nansemond,	do	OIVII Engineer.
	John A. Marks,		do	Farmer.
		Prince George,		Farmer.
200	Alex. Bruce,	Halifax,	do	
4	Thomas Blackburn,	T. 00	Jan 15	
T	Inomas Diackburn,	Jefferson,	1854	•
*940	S. Crutchfield,	C. stamlars:	July 4,	Ass't Prof. V. M. I.
₩9/11	W T Dotton	Spotsylvania,	1855	Ass't Drof V M I
241	W. T. Patton,	Richmond City,	do	Ass't Prof. V. M. I. Ass't Prof. V. M. I.
042	E. V. Bargamin,	Richmond City,	do	
	L. B. Williams,	Orange,	do	Ass't Prof. V. M. I.
	G. Buck,	Morgan,	do	Teacher.
	J. P. Wilson,	Cumberland,	do	Farmer.
246	W. T. Hardy,	Norfolk City,	do	Civil Engineer.
	E. C. Shepherd,	Jefferson,	do-	Teacher.
248	R. C. Allen,	Bedford,	do	Lawyer.
	E. J. Magruder,	Orange,	do	Farmer.
	B. H. Todd,	Nottoway,	do	Teacher.
251	W. Dupuy,	Dinwiddie,	do	
252	J. H. Waddell,	Augusta,	do	Teacher.
253	W. E. Fife,	Kanawha,	do	Lawyer.
	H. W. Cox,	Chesterfield,	do	Teacher.
Ş	E. J. Harvie,	Amelia,	do	Lieut. U. S. Army.
			July 4,	
*256	F. W. Smith,	Norfolk City,	1856	[College
*257	Ed. L. Smith,	Norfolk County,		Ass't Prof. Lynchbur
258	F. M. Suddoth,	Fauquier,	do	Teacher.
259	P. B. Stanard,	Richmond,	do	Ass't Prof. V. M. I.
	G. P. C. Rumbough,	Campbell,	do	Civil Engineer.
200				
	Geo. M. Edgar,	Monroe,	do	Teacher.

NO.	NAMES.	COUNTIES.	Date of	REMARKS.
NO.	. NAMES.	COUNTIES.	Gradu-	HEMAIIKS.
		-	ation.	
			July 4,	
263	Wm. B. Selden,	Norfolk City,	1856	Civil Engineer.
	J. L. Cross,	Warren.	do	Prof. Math. Winch'st'
265	T. B. Robinson,	King William,	do	Teacher. [College
266	E. Fowlkes,	Montgomery,	do	L
	R. M. McKinney,	Campbell,	do	Teacher.
268	W. Y. C. White,	Washington,	do	- 0.00
269	W. S. Guy,	Nottoway,	do	
270	M. N. Moorman,	Campbell,	do	Merchant.
271	J. L. Meem,	Campbell,	do	Civil Engineer.
272	F. M. Barton,	Frederick,	do	01,11 Zag-2001
273	F. M. Boykin,	Isle of Wight.	do	Teacher,
274	J. J. McAllister,	Isle of Wight,	do	Teacher.
	D. B. Penn,	Richmond City,	_	l'outiner:
276	W. J. Seargeant,	Louisa,	do	Teacher.
277	Wm. B. Clagett,	Loudoun,	do	Teacher.
278	C. S. Hurt,	Petersburg,	do	Teacher.
270	R. H. Hooe,		do	Leacher.
280	J. F. Alexander,	Fauquier,	do	Merchant.
	J. A. Galt,	Spotsylvania,	do	Farmer.
	John B. Cocke,	Fluvanna,	do	
	J. G. Gittings,	Powhatan,	do	Farmer.
284	T. H. Owen,	Harrison,	do	
204	F. H. Hannum,	Halifax,	do	
200	W. H. Hood,	Washington,	do	Teacher.
200	W. H. Easley,	Southampton,	do	reacher.
000	T. H. Halcomb,	Halifax,		
400	1. 11. Halcomb,	Mecklenburg,	do Tola 4	
*000	T McConsland	M	July 4, 1857	ì
	J. McCausland,	Mason,	_	
	R. M. Mayo,	Westmoreland,	do	
*291	J. J. Smith,	Alexandria,	do	
*009	A. M. Fauntleroy,	Frederick,	do	
	R. B. Taylor,	City of Norfolk,		
	Alex. Rives,	Albemarle,	do	
290	Chas. W. Hardy,	City of Norfolk,		
290	P. P. Slaughter,	Madison,	do	
297	J. Ker,	Northampton,	do	
298	R. K. McCausland,	Mason,	do	
299	B. F. Stewart,	Westmoreland,	do	
	A. Fulkerson,	Washington,	do	
	H. Ker,	Northampton,	do	
302	J. A. Hambrick,	Franklin,	do	
503	E. McConnell,	Richmond City		
	J. M. Steptoe,	Bedford,	do	
	John Read,	Roanoke,	do	
306	J. W. B. Bosworth,	Randolph,	do	
307	J. C. Hiden,	Orange,	do	
-308	J. H. Cameron,	Rockbridge,	do	

NO.	NAMES.	COUNTIES.	Date of Gradu- ation.	REMARKS.
309 S 310	S. G. White, J. W. Keeble,	Petersburg, Matthews,	July 4, 1857 do	

Names marked thus [*] most distinguished of their class—those with [†] signify death.

Note.—Graduates are requested to notify the Superintendent of any errors in the above Catalogue.

? Cadet E. J. Harvie having been appointed a Lieutenant in the U. S. Army, a short time before his class graduated, but having completed the studies of his class, he was graduated without class standing.

VIRGINIA MILITARY INSTITUTE,

LEXINGTON, VIRGINIA, JULY 4TH, 1857.

By Order of Col. F. H. SMITH,

S. CRUTCHFIELD,

Adj. V. M. I.

- Committee of the comm

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NOTICES OF SMITH'S STATISTICAL ARITHMETIC.

From the Board of Directors of the Literary Fund, Virginia.

The Board of Directors of the Literary Fund having examined Smith and Duke's American Statistical Arithmetic, composed by Francis H. Smith, Esq., Superintendent and Professor of Mathematics in the Virginia Military Institute, take pleasure in recommending the work, especially for the purpose for which it is designed, "to prepare beginners for the study of the more advanced parts of the science." The plan of inculcating valuable statistical information in the illustration of arithmetical rules is not only novel and attractive, but useful, and is doubtless calculated to make a strong impression on the minds of youth.

A a true extract from the minutes.

J. BROWN, Jr., Second Auditor. Signed,) Office of the Literary Fund Board, Va.

From J. H. Brown, A. M., Principal of Zane St. School, Philad.

It was with much pleasure that I examined the American Statistical Arithmetic by Smith and Duke, and an introduction to the same, by Francis H. Smith, A. M., both published by you. They are works of more than ordinary merit. With clear and definite Rules, they convey a large amount, of valuable information not usually within the reach of students of Arithmetic. Their general introduction will aid the cause of sound instruction in the Schools and Academies of our country.

Extract of a Letter of Prof. Powers, of Virginia University.

I consider it decidedly the best Arithmetic I have seen, not only as regards the valuable statistical information it contains, but also in its arrangement, and the very clear and simple explanation of the rules which it gives.

Notices of Smith's Algebra.

This work is designed to present as complete an Elementary course of Algebra, as the time devoted to the study of Mathematics in the Colleges of our country will allow; while it will be equally within the comprehension of the pupil of the High School or Academy.

In preparing this work, the author has adopted those explanations and demonstrations which an experience of many years in teaching, and a careful comparison of standard authors have shown to be best. Without following the system of any other writer, he has derived important aid from the works of Garnier, Bezout, Raymond, Bourdon, Lacroix, Francour, Euler, Hutton, Thompson, Goodwyn, Scott, and the Encyclopedia Metropolitana. Many of his examples have been selected from the valuable edition of Hutton's Mathematics, by Professor Rutherford of the Royal Military Academy, Woolwich.

This work covers the full course of Davies' Bourdon, and contains a new and beautiful demonstration of the Binomial Theorem in the case of an Exponent, by Professor Pike Powers, late of the University of Virginia.

From Prof. P. Powers, late Professor of University of Virginia.

I have been using your Algebra for nearly twelve months, and can truly say it answers my purpose better than any other I am acquainted with. It presents the leading principles of the science in a concise and simple form, and especially those higher principles which give beginners most trouble, so that I have never had my classes master them before with so little difficulty.

From Prof. W. N. Pendleton.

The work which you have translated, I have, ever since becoming familiar with it, regarded it as a masterpiece in that department of mathematical science—indeed my feelings respecting it have always partaken much of the enthusiastic. It bears the evident stamp of genius, and embodies more of the beauties of ingenuity, simplicity, and generalization, than any other work of that class of subjects with which my mathematical studies have made me acquainted.

From the Virginian, Winchester, Va.

A new Algebra, by Col. Francis H. Smith, the highly efficient and esteemed Superintendent of our Military Institute at Lexington, will require no eulogy of ours, in view of the rapid and entire success of the author's previous work, the Statistical Arithmetic. This work has all the prestige a city publisher can give it, and Virginians have thus all they demand before giving their encouragement to home productions. No Virginia school-boy will lose much by being minus Bonycastle and plus Smith.

Notices of Smith's Biot's Analytical Geometry.

From Prof. John B. Strange, Norfolk, Academy.

I have seen your Algebra, and, after a careful examination of it, I do not hesitate to pronounce it an excellent work—the best on the subject that I have seen. I shall, therefore, adopt it immediately in the Academy. I am so much pleased with all your mathematical works which have appeared, that I trust your labors in this department will not cease until you have completed the whole course.

From A. W. Millspaugh, Principal of the Classical School, Farmville.

It gives the definitions and some of the most abstruse parts of the science with greater clearness and perspicuity than any similar work with which I am acquainted—and I also think the copious examples given, a great de-

From Prof. Saunders, of William and Mary College.

I have long lamented the defect in logical arrangement of most of the principal treatises on the subject of Analytical Geometry, with regard to one of its most important applications—Conic Sections. The student is informed that they are Conic Sections, because they result from the intersection of a plane in different positions with the surface of a cone, but he is put in possession of their properties before any proof is given to him that they are what they are called. The very last step usually is, to show that they are Conic Sections. The treatise of Biot comes precisely up to my idea of the proper arrangement in this respect.